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**RCRA FACILITY ASSESSMENT  
McDONNELL-DOUGLAS CORPORATION  
HAZELWOOD, MISSOURI**

**CONCLUSIONS AND RECOMMENDATIONS**

EPA Contract No. 68-W4-0005  
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## 7.0 CONCLUSIONS AND RECOMMENDATIONS

This attachment to the RCRA facility assessment (RFA) at the McDonnell-Douglas Corporation facility at Hazelwood, Missouri, provides Science Applications International Corporation's (SAIC's) conclusions as to whether potential or documented releases from solid waste management units (SWMUs) at the facility (as discussed in the RFA Report) indicate further study should be conducted at the unit, and recommendations for further study. The information supporting these conclusions was obtained from the preliminary assessment (PA), visual site inspection (VSI) and sampling visit discussed in the RFA Report. Table 16 summarizes the conclusions and recommendations for each unit.

A number of the SWMUs at the Hazelwood facility are undergoing closure under the oversight of Missouri Department of Natural Resources (MDNR) Hazardous Waste Programs (HWP), Permits Section (SWMUs 1, 2, 3, 4, 6, 7, 11, 13, 14, and 15), and in accordance with MDNR guidelines. Closure investigations have been conducted at these units by MCD contractors, in concurrence with MDNR HWP Permits Section staff. As part of this RFA, SAIC collected soil samples at 8 units and one groundwater sample during the sampling visit (November 15 through 17, 1994). The sampling during the sampling visit was intended to be preliminary; its purpose was to document whether a release had occurred, not to characterize the nature or extent of the release. Sampling information and analytical data from closure investigations and the sampling visit are presented in the RFA Report.

Findings of the RFA include documented releases to soil and groundwater at many units, or high, moderate or low potential for releases to surface water, soil, groundwater subsurface gas or air pathways at some units. These findings are based on the data from the closure investigations and the sampling visit, findings of a hydrogeologic study conducted at the Ramp Area by an MCD contractor, and historical management practices determined during the VSI. Definition of a documented release in the RFA Report was any detectable concentration of organic contaminants, and concentrations of inorganic contaminants above background in the soil, or above maximum contaminant levels (MCLs) in groundwater (see the RFA Report). The comparison of analytical results to background in the report is only for the purposes of determining, qualitatively, that a concentration of a contaminant exceeded background concentrations, and should not be interpreted as a definitive determination of the amount of contaminant present, or the need for a cleanup.

Further characterization under the RCRA Facility Investigation (RFI) phase of corrective action is recommended for most units having documented or highly suspected releases, as identified on Table 16. However, at the request of MDNR, units 1, 2, 4, 6, 7, 9, and 11 are listed within this section as requiring no further action at this time because they are under the oversight of MDNR HWP Permits Section. MDNR has indicated that if, at some future date it is deemed more efficient to bring these units under corrective action rather than MDNR RCRA closure

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standards, that may also be done. SAIC, with the concurrence of MDNR, is recommending Units 3, 13, 14, and 15 be subject to further characterization under an RFI although they are undergoing closure. for corrective action other than further investigation under an RFI.

A health-based risk assessment is not recommended for these units at this time, nor would such a study be worthwhile given the limited amount of analytical data. A risk assessment may be useful after the RFI has been completed, as part of corrective measures studies.

A general recommendation for the RFI is to obtain useful background samples at the facility as a baseline to evaluate analytical data for metals and other inorganic contaminants in soils and groundwater. True background samples collected of natural soils upgradient of all industrial activities at the facility were not obtained during any of the closure investigations. If a background sample was collected (none were for the closure investigations at SWMUs 4, 6, 7, and 13-15) it was collected within the facility, near other SWMUs, and often represented fill that was brought in during construction in that area, rather than natural soils. Thus, comparisons of analytical results for environmental samples from these investigations were compared against both the background sample results from the closure investigation (where available), and background soil data from the adjacent St. Louis Airport Site (SLAPS). However, on-site background soil samples should be collected, and from various depths, since shallow soils likely are fill material brought in during construction, or moved from one location at the facility to another.

Another general recommendation for the RFI is to characterize the vertical and horizontal extent of the aquifer system beneath the facility. This aquifer has been identified at the adjacent SLAPS and James River Paper Company Facility to be between 14 and 100 feet below land surface (BLS). The shallower portion of this aquifer (above a clay layer) has been characterized as hydraulically connected with Coldwater Creek. The groundwater units sampled at the Ramp Area during closure investigations and at the industrial wastewater treatment plant (IWTP) during the sampling visit appear to be discontinuous water-bearing lenses or zones that might not be hydraulically connected to each other or the regional aquifer. However, the relationship between the shallow groundwater at the Ramp Area and IWTP and the regional aquifer is unclear and should be determined. The following activities should be conducted as part of the characterization of the groundwater system:

- Drill several test borings to bedrock around the facility to identify the sequence of unconsolidated deposits beneath the facility, and determine whether the coarse basal deposits are present at the facility.
- Install monitoring wells upgradient and downgradient of the facility and of each unit recommended for further characterization. Several should be nested sets above and below the clay (if it is present) to facilitate aquifer tests to determine

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whether the clay acts as an aquitard (see below).

- Collect groundwater samples to determine whether there has been a release to both the shallow and deep portions of the regional aquifer.
- Conduct aquifer tests to determine basic characteristics such as hydraulic conductivity of both upper and lower systems, and whether the clay layer is an effective aquitard. If contamination in the upper portion of the regional aquifer is detected from sampling, groundwater modeling, and/or dye tests of the contaminant plume may be necessary to establish whether there is a connection to Coldwater Creek.

Many SWMUs have a moderate or high potential for release to surface water. The determination of these potentials is the result of the units not having any or adequate secondary containment and either known spills or analytical evidence that spills have occurred in the past. A general recommendation for interim measures is that all units lacking any or inadequate secondary containment (i.e., Units 10, 17, 21, 22, 28, and 31) should have such containment structures constructed immediately. In addition, units having areas of worn or damaged asphalt and/or concrete should have those areas repaired immediately (i.e., Units 10, 17, 22, 26, and 31).

In the following sections, SWMUs are discussed in the order of decreasing degree of concern. The first SWMUs presented are those having documented releases, or a potential for contamination but could not be sampled during the sampling visit. The last section presents all SWMUs that are recommended for no further action.

#### **7.1 Unit 10, Current Waste Oil Tank, Building 5**

Tetrachloroethylene (PCE) and polynuclear aromatic hydrocarbons (PAHs) were detected in soil samples to a depth of 24 inches BLS from this unit, indicating a release from this unit has occurred. SAIC recommends further characterization of this unit under an RFI. Specifically, soil samples should be collected from various locations from 0 to 30 feet from the tank. Samples should be collected from land surface to the depth of the regional water table. PCE is very mobile in the subsurface, so upgradient and downgradient groundwater monitoring wells should be installed within the regional aquifer to evaluate whether a release to groundwater has occurred via the soil pathway. Samples should be analyzed for VOCs, semivolatile organic compounds (SVOCs), and a complete metals scan. A soil gas investigation may be useful at this unit to identify areas of contamination with volatile organic compounds (VOCs) in the subsurface gas. Immediate interim measures of resealing the asphalt around this tank and increasing the secondary containment to hold an overflow of least 100 gallons are highly recommended.

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**7.2 Unit 13, Waste Jet Aircraft and Hydraulic System Spillage, Hush House, Unit 14, Waste Jet Aircraft Fuel Storage, Fuel Pit #3 and Fuel Pit #4 Waste Tanks, Unit 15, Waste Jet Fuel Storage, Ramp Station 1 and 2 Waste Tanks**

Units 13, 14, and 15 are within 1,500 feet of each other, and managed the same wastes (jet fuel). The underground storage tanks were removed at all three units, and evidence of fuel leaks from the tanks was documented in soil samples from around the tanks. Groundwater and soil contamination with total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene, and (total) xylenes (BTEX) has been identified at all three units. Concentrations range from 32 to 68,960 ppm TPH and 59 to 124,500 ppb total BTEX in the groundwater, and 6 to 117 ppm TPH and 154 to 7,871 ppm BTEX in the soils. Groundwater remediation activities at these units are ongoing, under the oversight of MDNR. With concurrence of MDNR, SAIC recommends further characterization of these units during an RFI. Specifically, soil samples should be collected from various locations at each unit from land surface to at least 20 feet BLS or the water table in the regional aquifer. Monitoring wells should be installed to characterize the groundwater system at the Ramp Area and to evaluate whether a release to groundwater in the regional aquifer has occurred either via the shallow groundwater (if the two systems are hydraulically connected) or via the soil pathways. Aquifer tests may be necessary to determine if the shallow system is hydraulically connected to the regional aquifer. A soil gas investigation may be useful at this unit to identify areas of contamination with VOCs (i.e., fuel) in the subsurface gas. All soil and groundwater samples should be analyzed for VOCs, SVOCs, and a complete metals scan.

**7.3 Unit 17, Perchloroethylene Recovery Unit, Building 51**

PCE in concentrations as high as 290,000  $\mu\text{g}/\text{Kg}$  was detected in samples collected to 24 inches BLS, and xylenes, acetone, and 1,2-dichloroethylene (1,2-DCE) also were detected in the soil samples, indicating a release from this unit has occurred. SAIC recommends further characterization of this unit under an RFI. Additional soil samples should be collected from land surface to the depth of the water table in the regional aquifer. A soil gas investigation would be useful at this unit to identify areas of contamination with VOCs, especially PCE, in the subsurface gas, and to determine locations for collecting soil samples. PCE, xylenes, acetone and 1,2-DCE all are very mobile in the subsurface, so upgradient and downgradient groundwater monitoring wells should be installed within the regional aquifer and samples collected to evaluate whether a release to groundwater has occurred via the soil pathway. All soil and groundwater samples should be analyzed for VOCs, SVOCs, and a complete metals scan. Immediate interim measures recommended for this unit include repairing the asphalt damaged by numerous spills or replacing it with concrete, which might be more resistant to the PCE. In addition, a spill containment system, such as a metal pan, should be installed beneath the tanks to capture any spills that occur during transfer of the recycled PCE.

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**7.4 Unit 21, Industrial Wastewater Treatment Plant Tanks, S-1, S-2, S-3, S-4, and E-1, E-2, E-3, and Unit 3, Sludge Holding Tank**

Units 21 and 3 are part of the IWTP, and manage wastes containing similar contaminants. Heavy metals were detected in the groundwater sample from SWMU 21 in concentrations exceeding action levels for groundwater. The presence of these contaminants indicates that a release to groundwater has occurred. In addition, arsenic, barium, chromium, lead, nickel, silver and cyanide were detected at concentrations above background (closure investigation and SLAPS) in soil samples from SWMU 3, and aluminum, arsenic, beryllium, chromium, vanadium, and cyanide were detected at concentrations above background (SLAPS) in soil samples from SWMU 21. Based on the closure investigation and sampling visit findings, SAIC recommends further characterization of these units during an RFI. Whether the contamination detected at each unit is from SWMU 21 or SWMU 3 is unclear and probably can not be determined, so both units should be evaluated together. Although Unit 3 is undergoing closure under MDNR oversight, SAIC believes it would be beneficial to collect additional samples from SWMU 3 concurrent with an investigation at SWMU 21.

Angled soil borings should be drilled beneath the S- and E-series tanks and the sludge holding tank and soil samples should be collected directly beneath the tanks. Additional soil samples also should be collected from several depths adjacent to the buried portion of the SWMU 3 holding tank, between the two SWMUs, and downgradient of both. In addition, groundwater monitoring wells should be installed within the regional aquifer upgradient and downgradient to evaluate whether a release to the regional aquifer has occurred via the soil pathway. All samples collected should be analyzed for VOCs, SVOCs, a complete metals screen, and cyanide. SAIC also recommends integrity testing of piping into the IWTP from all units piping wastes there, and piping from the S-series tanks at SWMU 21 to the Sludge Holding Tank (SWMU 3).

**7.5 Unit 28, Leaking Transformer, Building 6**

SAIC was unable to collect soil samples at Unit 28 during the sampling visit because of access and utilities clearance problems. However, there is clear evidence of an ongoing release of transformer oil from this unit. Analytical data for a sample of the oil indicates it contains polychlorinated biphenyls (PCBs). SAIC recommends immediate interim measures to stop the leak or replace the transformer. Additional interim measures should include determining whether a concrete pad exists under the gravel at this unit, and if not, removing any obviously contaminated gravel and underlying soils. Further characterization of this unit during an RFI should be conducted to assess whether PCBs have been released to the environment. Soil samples from land surface to the regional aquifer, and groundwater samples within the regional aquifer at this unit should be collected to determine whether a release has occurred. All samples collected should be analyzed for VOCs, SVOCs, PCBs, and a complete metals screen. Because oil contains volatile components, a soil gas investigation might be useful to identify areas of

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VOC contamination in the subsurface gas.

#### **7.6 Unit 8, Scrap Dock Shelter, Area 1**

VOCs (trichloroethylene PCE, toluene, 1,2-DCE) were detected at Unit 8 in soil samples to 12 inches BLS. In addition, concentrations of metals in one sample from 12 to 24 inches BLS were above those in other samples from this unit. The presence of the VOCs, and perhaps the metals in the one sample indicate that a release from this unit has occurred and SAIC recommends further characterization of this unit during an RFI. Characterization should focus on the shallow soils where the VOCs were detected, the area beneath the sump for this unit, and the regional groundwater. Soil samples should be collected in areas where spills are most likely to have occurred and beneath the sump. Groundwater monitoring wells should be installed upgradient and downgradient within the regional aquifer to evaluate whether a release to groundwater has occurred via the soil pathway. All samples collected should be analyzed for VOCs, SVOCs, and a complete metals screen.

#### **7.7 Unit 22, Building 2 Paint Booth Satellite Accumulation Drum**

Xylenes were detected in the sample collected in this unit. Also, the sample was discolored, and the down-hole photoionization detector reading indicated the presence of organic contaminants. Xylene is a typical solvent used in paints and the presence of xylenes in the soil samples indicates that a release from this unit has occurred. In addition, there is an area covered with timbers (suspected to be a below-grade excavation) adjacent to the building. A subsurface pipe that appears to be leading to the area covered by the timbers also was encountered during the sampling visit. Facility representatives know nothing about the pipe or the covered area.

SAIC recommends that this unit be further characterized during an RFI because of the evidence that a release from this unit has occurred. Before the RFI plan is prepared, the timbers should be removed and the area beneath them evaluated. If this area requires addressing during the RFI, appropriate sampling measures should be employed. These measures might include collecting soil samples around the area and, if there is an excavated area beneath the timbers, soil samples should be collected from the sides and bottom of the excavation, and several feet below the bottom of the excavation. The subsurface pipe near the excavation also should be investigated. Groundwater monitoring wells should be installed within the regional aquifer and samples collected to evaluate whether a release to groundwater has occurred via the soil pathway. All samples collected should be analyzed for VOCs, SVOCs, and a complete metals screen. A soil gas investigation might be useful to identify areas of xylene contamination, as well as other VOCs in the subsurface gas. Interim measures should include constructing secondary containment (curbing) around the drum and repairing the damaged concrete.

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**7.8 Unit 31, Maintenance Shop Waste Oil Tank, Building 22**

PAHs (fluoranthene and pyrene) and PCE were detected in the soil samples from this unit, indicating a release from this unit has occurred. Based on these findings, further characterization of this unit under an RFI is recommended. Characterization should focus on soils from land surface to the water table all around the building since contaminants were detected in the 0 to 12-inch interval 8 feet from the building and in the 12 to 24-inch interval adjacent to the building. Samples of the regional groundwater should be collected from monitoring wells installed upgradient and downgradient from this unit. Samples should be analyzed for A soil gas investigation might be useful to focus the soil sampling and installation of monitoring wells.

**7.9 Unit 26, Former Less-Than-90-Day Storage Area, Building 40**

Soil contamination with metals was documented at this unit based on the results of the sampling visit. These contaminants probably result from the former use of this area as a less-than-90-day storage area, rather than the current use as a product storage area, or the interim use as a heavy equipment storage area. Based on these findings, SAIC recommends further characterization of this unit under an RFI. Additional soil samples should be collected from land surface to the depth of the water table in the regional aquifer. If soil contamination is detected, monitoring wells should be installed into the regional aquifer, and samples should be collected. All samples should be analyzed for VOCs, SVOCs, and a complete metals scan. Immediate interim measures recommended for this unit include repairing cracks in the concrete and asphalt.

**7.10 5.27 Unit 27, Waste Nitric and Hydrofluoric Acid Scrubber Saddles Drums Storage, Building 52**

Soil contamination with PCE and metals was documented at this unit based on the results of the sampling visit. Since the scrubber saddles stored were exposed to nitric and hydrofluoric acid fumes, the metals contamination is consistent with their use. Since metal parts may be cleaned with solvents such as PCE prior to etching with acids, the PCE contamination could have originated from the waste saddles stored at this unit. Based on the findings of the sampling visit and the past history of this unit, SAIC recommends further characterization of this unit under an RFI. Additional soil samples should be collected from land surface to the depth of the water table in the regional aquifer. If soil contamination is detected, monitoring wells should be installed into the regional aquifer, and samples should be collected. All samples should be analyzed for VOCs, SVOCs, and a complete metals scan. No interim measures are recommended for this unit because the saddles and drums have been removed.

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**7.11 Units Recommended for No Further Action**

Units 1, 2, 4, 6, 9, and 11 are recommended for no further action because they are undergoing closure under the oversight of MDNR HWP Permits section. Units 5, 16, 18, 19, 20, 23, 24, 25, 29, 30, and 32 require no further investigation because they do not pose any apparent risk to release contaminants to the environment. These conclusions were based on observations during the VSI, and, in the case of units 5 and 23 through 25, reevaluations during the sampling visit.

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**TABLE 16. RELEASE AND EXPOSURE POTENTIALS, LEVELS OF CONTAMINATION, AND RECOMMENDATIONS  
McDONNELL-DOUGLAS HAZELWOOD, MISSOURI FACILITY**

<b>SWMU #</b>	<b>SWMU Name</b>	<b>Material of Concern</b>	<b>SW</b>	<b>Soil</b>	<b>GW</b>	<b>SSG</b>	<b>Air</b>	<b>Level of Contamination</b>	<b>Recommended Further Action</b>
1	Waste Sodium Hydroxide Solution Storage, Tanks H19 and H20	Waste sodium hydroxide (D002, D003, D007)	Low to Moderate	Documented Release	Low	Low	None	See Table 5 of RFA Report	None - undergoing closure under MDNR oversight.
2	Waste Nitric and Hydrofluoric Acid Solution Storage, Tanks H12, H13, H14	Waste nitric and hydrofluoric acid	Moderate	Documented Release	Low	Low	None	See Table 6 of RFA Report	None - undergoing closure under MDNR oversight
3	Wastewater Sludge Collection Tank	Water insoluble sludge (F006, F019)	Low	Documented Release	High	Low	Low	See Table 7 of RFA Report	Further characterization under RFI and integrity testing of piping
4	Leaked or Spilled Jet Aircraft Fuel Storage Tank	Waste jet aircraft fuel (D001)	Low	Documented Release	High	High	Low	See Table 8 of RFA Report	None - undergoing closure under MDNR oversight
5	Current Reactive Cyanide and Sulfide-bearing Waste Storage, Area 2	Cyanide and sulfide wastes (D006, D010, F009, F011)	None	None	None	None	None	Unknown	None

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**TABLE 14. RELEASE AND EXPOSURE POTENTIALS, LEVELS OF CONTAMINATION, AND RECOMMENDATIONS  
McDONNELL-DOUGLAS HAZELWOOD, MISSOURI FACILITY (continued)**

<b>SWMU #</b>	<b>SWMU Name</b>	<b>Material of Concern</b>	<b>SW</b>	<b>Soil</b>	<b>GW</b>	<b>SSG</b>	<b>Air</b>	<b>Level of Contamination</b>	<b>Recommended Further Action</b>
6	Former Reactive Cyanide and Sulfide-bearing Waste Storage, Area 2	Cyanide and sulfide wastes (D006, D010, F009, F011)	Moderate	None	None	None	Low	See Table 9 of RFA Report	None - undergoing closure under MDNR oversight
7	Explosive Waste Storage, Area 3	Explosive wastes	None	None	None	None	None	See Table 10 of RFA Report	None - undergoing closure under MDNR oversight
8	Scrap Dock Shelter, Area 1	Drum storage of acid, alkalis, oils, and variety of wastes	None	Documented Release	High	High	High	See Table 4 of RFA Report	Further characterization during RFI
9	Waste Nitric and Hydrofluoric Acid Solution Storage, Tanks H1, H2, H3, H4, H5 and H6	Waste nitric and hydrofluoric acid (D002)	Low to Moderate	Documented Release	Moderate	Low	High	See Table 11 of RFA Report	None - approved closed by MDNR (See Section 5.9)
10	Current Waste Oil Tank,	Waste Oil (D008)	High	Documented Release	High	High	High	See Table 4 of RFA Report	Further characterization during RFI and interim measures

SW = Surface Water    GW = Groundwater    SSG = Subsurface Soil Gas  
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**TABLE 14. RELEASE AND EXPOSURE POTENTIALS, LEVELS OF CONTAMINATION, AND RECOMMENDATIONS  
McDONNELL-DOUGLAS HAZELWOOD, MISSOURI FACILITY (continued)**

<b>SWMU #</b>	<b>SWMU Name</b>	<b>Material of Concern</b>	<b>SW</b>	<b>Soil</b>	<b>GW</b>	<b>SSG</b>	<b>Air</b>	<b>Level of Contamination</b>	<b>Recommended Further Action</b>
11	Former Waste Oil Tank,	Waste oil (D008)	Moderate	Documented Release	Moderate	Moderate	Low	See Table 12 of RFA Report	None - undergoing closure under MDNR oversight
12	Waste Jet Aircraft and Hydraulic System Spillage Storage Tank, F-18 Silencer	Waste Jet Aircraft fuel (D001)	None	Low	Low	Low	None	None	None - approved closed by MDNR (See Section 5.12)
13	Waste Jet Aircraft and Hydraulic System Spillage Storage Tank, Hush House	Waste Jet Aircraft fuel (D001)	Moderate to High	Documented Release	Documented Release	High	Low to Moderate	See Table 13 of RFA Report	Further characterization during RFI
14	Waste Jet Aircraft Fuel Storage Tanks, Fuel Pits #3 and #4	Waste Jet Aircraft fuel (D001, D098)	Moderate to High	Documented Release	Documented Release	High	Low to Moderate	See Tables 13 and 14 of RFA Report	Further characterization during RFI

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**TABLE 14. RELEASE AND EXPOSURE POTENTIALS, LEVELS OF CONTAMINATION, AND RECOMMENDATIONS  
McDONNELL-DOUGLAS HAZELWOOD, MISSOURI FACILITY (continued)**

SWMU #	SWMU Name	Material of Concern	SW	Soil	GW	SSG	Air	Level of Contamination	Recommended Further Action
15	Waste Jet Fuel Storage Tanks , Ramp Station 1 and 2	Waste jet aircraft fuel (D001)	Moderate to High	Documented Release	Documented Release	High	Low to Moderate	See Tables 13 and 15 of RFA Report	Further characterization during RFI
16	Methyl Ethyl Ketone/Methyl Isobutyl Ketone Recovery Unit, Building 48	Spent MEK (F005) and MIBK (F003)	None	None	None	None	None	Unknown	None
17	Perchloroethylene Recovery Unit	Recovered perchloroethylene (F001,F002)	Low	Documented Release	High	High	High	See Table 4 of RFA Report	Further characterization during RFI and interim measures
18	Methyl Ethyl Ketone/Methyl Isobutyl Ketone Recovery Unit, Building 27	Spent MEK (F005) and MIBK (F003)	None	None	None	None	None	Unknown	None
19	Drum Storage Areas and Related Satellite Accumulation Areas	Spent solvents (F005, F003)	None	None	None	None	None	Unknown	None

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**TABLE 14. RELEASE AND EXPOSURE POTENTIALS, LEVELS OF CONTAMINATION, AND RECOMMENDATIONS  
McDONNELL-DOUGLAS HAZELWOOD, MISSOURI FACILITY (continued)**

SWMU #	SWMU Name	Material of Concern	SW	Soil	GW	SSG	Air	Level of Contamination	Recommended Further Action
20	Paint Solids Accumulation Dumpsters	Rags with absorbed solvents (D001, F003, F005)	Low	Low	Low	Low	High	Unknown	None
21	Wastewater Treatment Tanks E-1, E-2, E-3, S-1, S-2, S-3, and S-4	Various liquid wastes generated at MCD (D002, D004, D005, D006, D007, D008, D010)	Moderate	High	Documented Release	Low	Low to Moderate	See Table 4 of RFA Report	Further characterization during RFI and integrity testing of piping
22	Paint Booth Satellite Accumulation Drum	Spent paint solvents (F005, F008)	Low to Moderate	Documented Release	High	High	High	See Table 4 of RFA Report	Further characterization during RFI; immediate determination of what lies beneath timbers and where pipe comes from (See Section 5.22)
23	Less-Than-90-Day Storage Area, Buildings 45C and 45D	Various waste paints, oils, and spent solvents	None	None	None	None	Low	Unknown	None
24	Less-Than-90-Day Storage Area, Building 2	Various waste paints, oils, and spent solvents	None	None	None	None	Low	Unknown	None

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**TABLE 14. RELEASE AND EXPOSURE POTENTIALS, LEVELS OF CONTAMINATION, AND RECOMMENDATIONS  
McDONNELL-DOUGLAS HAZELWOOD, MISSOURI FACILITY (continued)**

<b>SWMU #</b>	<b>SWMU Name</b>	<b>Material of Concern</b>	<b>SW</b>	<b>Soil</b>	<b>GW</b>	<b>SSG</b>	<b>Air</b>	<b>Level of Contamination</b>	<b>Recommended Further Action</b>
25	Less-Than-90-Day Storage Area, Building 51	Various waste paints, oils, and spent solvents	None	None	None	None	Low	Unknown	None
26	Former Less-Than-90-Day Storage Area, Building 40	Various waste paints, oils, and spent solvents	Moderate to High	Documented Release	Low	None	Moderate	See Table 4 of RFA Report	Further characterization during RFI, and interim measures
27	Waste Nitric and Hydrofluoric Acid Scrubber Saddles Storage	Waste nitric and hydrofluoric acid scrubber saddles	Moderate	Documented Release	High	High	Low	See Table 4 of RFA Report	Further characterization during RFI
28	Leaking Transformer	Oil (D098) and PCBs	High	High	High	High	High	Unknown	Interim measures (see Section 7.4), Further characterization during RFI
29	Waste Ferracoat, Methyl Ethyl Ketone, and Trichloroethene Drum Storage	Waste ferracoat, spent MEK, and TCE (F001, F005)	None	None	None	None	None	Unknown	None

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**TABLE 14. RELEASE AND EXPOSURE POTENTIALS, LEVELS OF CONTAMINATION, AND RECOMMENDATIONS  
McDONNELL-DOUGLAS HAZELWOOD, MISSOURI FACILITY (continued)**

<b>SWMU #</b>	<b>SWMU Name</b>	<b>Material of Concern</b>	<b>SW</b>	<b>Soil</b>	<b>GW</b>	<b>SSG</b>	<b>Air</b>	<b>Level of Contamination</b>	<b>Recommended Further Action</b>
30	Chemical Etching, Spill Containment Area	Overspill from various chemicals in etching tanks (D002, D004, D005, D006, D007, D008, D010)	None	Moderate	Low	Low	None	Unknown	None
31	Maintenance Shop Waste Oil Tank	Waste Oil (D098)	High	Documented Release	High	High	High	See Table 4 of RFA Report	Further characterization during RFI
32	PCB Storage Area	PCB oil (D098)	None	None	None	None	None	Unknown	None

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